

mailed for him no alternative but flight, and the abandonment of his rich hereditary patrimony; here the worthy subject of our sketch stepped in to avert the additional sting of poverty; and, retaining to the close of life the same sentiments, bequeathed to the only son of his early benefactor an estate of nearly 3000l. a year, together with his plate and a thousand pounds in money.

To the Radcliffe Library he left five hundred volumes, including one hundred scarce and valuable works on architecture, and some portfolios of his unemployed designs. He was

also a liberal benefactor to several public charities of London, and left substantial marks of esteem to many personal friends.

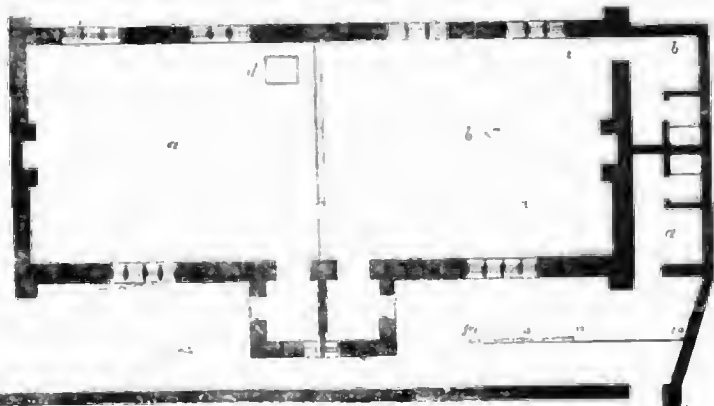
To those of our readers whose attention may be excited by this brief memoir to the works of Gibbs, we would say, that, in 1728, he published a volume on architecture, with many plates, which may be advantageously consulted by the student.

He died in London, after a lingering illness of five years, in 1754, and was interred in the church of St. Marylebone.

SUNDAY SCHOOL.



GROUND PLAN.



SUNDAY SCHOOL IN CHURCH TOWN.

TO THE EDITOR OF THE BUILDER.

SIR,—The parish church of Garstang stands two miles from the town of Garstang, in a small village called Church Town, which is rather remarkable, as Garstang must have been built at a very early period, and on the side of the great north road: the town was incorporated in the seventh year of Edward the Second. A new Sunday School has been lately built, adjoining the churchyard, at the expense of the present vicar, James Pedder, M.A., and which has cost him 3200l., beside the land. The churchyard is very large; and there are some remarkably large sycamore trees on the east and south sides. The school is built on the east and south corner of the churchyard. The style corresponds with the church, the windows with the upper windows of the church, of which a view is given in the *Gardener's Magazine* of last year, and which church must have been built at a very early period. The school has a most striking and interesting effect from whatever part of the churchyard it is viewed; here nature and art are truly met together. There is one ash tree 70 feet high, and nearly 6 feet in diameter at the bottom; it is completely hollow, and the inside of the main bole of the tree is occupied by jackdaws for their nests. Their entrance into the tree is about 30 feet from the ground, and there is no doubt but some of their nests are at the bottom of the tree, level with the ground, so that it is impossible for them to be seen

at; and whether this tree has been excavated by the birds, or decayed, is unknown: the outside has no appearance of decay. The school is built behind three of those sycamore trees, and the entrance is from the churchyard. The inside of the school is 54 feet by 21 feet, and 12 feet high at the sides, and in the centre 18 feet; it is not seated, and is calculated for 200 scholars; it is divided into two parts by a folding partition, the one part for the boys and the other for the girls: it is well lighted. The superintendent's desk is placed at *d*, as shown in plan; a door is fixed in the partition near the desk, for seeing into the other part. The whole of the partition will fold back, so that the whole appears as one, when required. The Sunday scholars are taught by gratuitous teachers; there is also an infant school kept in it during the week. There are two entrances to the school, as shown by the plan, and each entrance is fitted up with every convenience for hats and cloaks. There are two privies, shown by *d* and *b*: one is entered from the front and the other from the inside of the school. It is built of brick; the windows and door-jambes are stone; the brickwork is rough, coated over and whitewashed yearly, which gives it a most striking appearance at this season of the year, amongst the green trees. The whole of the work has been done in the very best manner, to the entire satisfaction of the Rev. Mr. Pedder. Now as the education question is exciting so much of the public attention, you will, I hope, allow it an early place in *THE BUILDER*.

M. SAUL.

MATERIALS USED IN ARCHITECTURE AND KINDRED ARTS.

STONES.

Marble.—The class of rocks denominated *calcareous* are exceedingly numerous and abundant in nature; and of these, marble in its different varieties is one of the most beautiful. It is a granular carbonate of lime, varying in colour, texture, and hardness, and being susceptible of a fine polish, it is extensively used for building, statuary, decorations, and inscriptions. In dry and temperate countries, it is one of the most durable of substances, as is proved by the edifices of Athens, which have retained their polish for more than two thousand years. Severe frost, preceded by moisture, causes it to crack and scale; and great heat reduces it to quicklime. Marble is wrought by chiselling, and by sawing with smooth plates of iron, along with sand and water. It is polished by rubbing with sand and water, and afterwards with putty and other soft substances.

Numerous stones of the calcareous class, more or less approaching to marble in their character, have been converted to use in different countries. The pyramids of Egypt are built of a greyish-white calcareous stone, enclosing shells. The Parthenon and other structures of Athens are of Pentelican marble, distinguished by slight green veins. The mosques of Constantinople are of a fine grained limestone from Pappenhelm, the same which is now used in lithography. At Rome, a porous whitish limestone, called *travertine* by the ancients, and *travertine* by the moderns, is the material of the Coliseum, of St. Peter's church, and other structures. The ruins of Pastum are of a stone nearly similar. Paris is built with a calcareous stone very prevalent in France, nearly the whole range of the Jura being of that material. The Portland stone, of which St. Paul's and other edifices in London are constructed, is a calcareous rock called *dolite* by geologists. Of those finer calcareous rocks, constituting the marbles, many are found in Great Britain, particularly in Wales and the highlands of Scotland; but they are not wrought extensively, as they are not employed except for interior ornaments, such as chimney-pieces, and for this purpose they are excelled by foreign marbles of the pure white variety. The Parian marble, of which the Venus de Medicis is formed, is reckoned the finest of its kind.

Granite.—This is apparently the oldest and most deeply situated of all rocks; and is often found shot up to great heights among rocky materials of more recent formation. It is very hard and durable, and is obtained for the purpose of the architect or sculptor in larger pieces than any other rock. Granite is a compound stone, varying in colour and coarseness, but having generally a whitish-grey or mixed appearance. It consists of three constituent parts, namely, *quartz*, the material of rock crystal; *feldspar*, which gives its colour, and which is the material of porcelain earth; and *mica*, a transparent, thin, or foliated substance, which affords a flexible substitute for glass, when obtained in large pieces. Granite is chiefly used for building. It is split from the quarries by rows of iron wedges driven simultaneously in the direction of the intended fissure. The blocks are afterwards hewn to a plane surface by strokes of a sharp-edged hammer. Granite is also chiselled into balustrades, capitals, and other ornamental objects; but this operation is difficult, owing to its hardness and brittleness. It is polished by long-continued friction with sand and emery. There are large quarries of granite in the British Islands, particularly near Dublin and Aberdeen; the stone from the latter is highly celebrated, and has been used in building Waterloo Bridge in London.

Porphyry.—This, like granite, is a compound rock, commonly consisting of feldspar and quartz; the former in more or less distinct crystals; there are, however, several varieties. The colour of porphyry is often red or green, and, when polished, is valuable for ornamental work, being superior to marble, on account of its greater hardness. This rock abounds in Egypt, in Mexico, and South America; it also exists in the vicinity of Boston, in North America.

Lapis Lazuli.—This is a stone of a splendid azure-blue colour, often mingled with small